

MANIPULATION OF SPECIMENS ON SLIDES

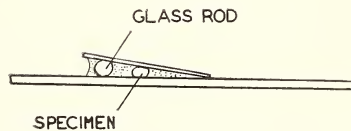
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While the writer was in France at the Université de Nancy engaged in a taxonomic study of the Class Symphyla, he was introduced to a convenient method of preparing temporary whole mounts of small elongate arthropods. These mounts have a distinct advantage over other temporary or "permanent" slide preparations in that the specimen can be manipulated for study from all sides.

The materials required are simple and readily available in any laboratory. They consist of microscope slides, square cover slips, a saturated solution of potassium hydroxide, a mixture of 1 part glycerin and 10 parts water, and a series of fine glass rods that can be made by drawing out glass tubing.

The specimen is mounted on the slide in a drop of the glycerin-water mixture. A glass rod of a slightly greater diameter than that of the specimen is placed along side of it. Then the cover slip is added so that one end of it rests on the slide and the other end is supported by the glass rod. A drop or two of the potassium hydroxide solution may be added to clear the specimen; additional drops of the glycerin-water mixture may be added until the area under the cover is flooded. The specimen is then ready for examination.

With this mount a specimen can be rolled and brought to rest in almost any desired longitudinal position for examination simply by pushing either end of the cover slip with some appropriate instrument. It should be pointed out that the diameter of the glass rod is very important. If it is less



than that of the specimen, the latter will be jammed between the cover slip and the slide and hence cannot be rolled without risk of injury. If the diameter of the glass rod is much greater than that of the specimen, the latter will float about out of control. Practice is required to attain proficiency.

The writer has had success with specimens ranging from 0.5 to 8.0 mm. in length and has seen the method employed in studies on even larger specimens such as *Campodea*. With specimens up to about 4 mm. in length, the high-dry and even oil immersion objectives can be used to study the parts of the body lying next to the cover slip.